

NATURE EXPERIENCE AND EDUCATION

for people with disabilities

Part 1

Guided nature experiences and educational programmes



Picture title page: The Eifel National Park has been a reference for inclusive nature experiences in Germany for years. Here: An excursion in the barrier-free nature experience area „Wilder Kermeter“.

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1. Introduction

1.1 About the project

In this brochure, you will find a handbook for guided nature experiences. It mainly focuses on offers for adults with different disabilities. Their inclusion into the society is an important objective, also in the EU.

Many Member States have already started to address this topic, for others the issue of inclusion is still uncharted territory and people with disabilities would like to see faster action in various areas. For example, it is very difficult for many people to go out into nature and participate in nature tours and environmental education programmes.

The Erasmus+ project “Assuring the access to nature education and nature experience for impaired people” (acronym „Nature without barriers“) was initiated to enable people with disabilities to access nature and participate in educational programmes.

The project develops, tests and distributes handbooks for nature educators to encourage and support them in creating and implementing offers, accesses and programmes for people with different disabilities. The handbooks propose concrete measures that can be implemented in nature reserves/centres and that are intended to strengthen the skills of nature guides and rangers in their work with new, unfamiliar target groups.

The project will provide access to correspondent competences and qualifications in environmental education. This means that, on the one hand, the offered programmes can give an opportunity to relax and enjoy. On the other hand, people can be inspired to become active in protecting nature and environment.

With this project, the partners want to show concrete measures to be implemented in nature conservation areas/centres. They want to indicate important competences to be acquired by nature educationists and to provide correspondent tools.

All partners in this project consortium have already worked on the accessibility topic before. They see the need of further activities and want to share their experiences. Providing impaired people with access to nature experience and nature education is an important step towards the European goal named inclusion.

The project runs from October 2018 to August 2021. You will find detailed information about the project and its outputs on the project website <https://www.nature-without-barriers.eu/en/>.

1.2 Project partners

The Global Nature Fund (GNF) is an international non-governmental, non-profit environmental foundation based in Germany. Since 1998, GNF has coordinated the Living Lakes partnership comprising over 100 organisations worldwide. With the project „Nature Experience for All“ finished in 2016, GNF started to work on nature experience for blind and visually impaired people. The aim of the foundation now is to reach more target groups with educational materials for nature experience.

The Stowarzyszenie Ekologiczne Etna (Environmental Association Etna) works mainly in the fields of environment, sustainable development and environmental education. Etna concentrates its work in the Barycz River Valley, southern Poland. Environmental NGOs active in this region support local development based on region's natural values, including nature tourism and soft adventure recreation. Etna works together with over 100 members from local authorities, business and social sectors. Etna has been largely involved in environmental education programmes for people of various age groups with disabilities. The beneficiaries were mostly people with learning difficulties.

The Lake Balaton Development Coordination Agency (LBDCA) is a non-profit company founded in January 2000 by the Lake Balaton Development Council. The Agency performs professional and operational tasks to promote the development of the Lake Balaton Resort Area. The aim of LBDCA is to provide effective assistance to make Lake Balaton and its vicinity one of the most attractive regions in Hungary and Europe. One of the main activities of the Agency is the implementation of long-term development plans for the Lake Balaton Resort Area. LBDCA attaches great importance to communication activities to raise awareness of environment and nature protection and to promote environmentally sound behaviour.

The German Federation of the Blind and Partially Sighted (DBSV) is a self-help organisation, stakeholders and community of solidarity of blind and visually impaired people in Germany. It is the umbrella organisation for 20 regional self-help organisations for the blind and visually impaired and aims to create conditions that enable blind and visually impaired people to lead a self-determined and independent life.

The DBSV has been active in the tourism sector since 2006. It promotes interests of blind and partially sighted people in the tourism service chain, maintains contact with all parties involved. The organisation has created handouts for the barrier-free design of tourist facilities and developed recommendations for the design of accessible trails and walking paths for blind and partially sighted people.

The environmental umbrella organisation “Umweltdachverband (UWD)” is a platform for 37 member organisations in Austria. Its main topics are environmental protection, alpine conservation, agriculture, forestry, as well as renewable energy. Different communication strategies form important tools of UWD's educational work. The focus is on supporting multipliers in various fields of education in their work. Therefore, most projects involve the development of teaching materials, school counselling, workshops, the organisation of major events, and PR work.

1.3 Work with this brochure

This brochure offers insights and suggestions to work with disabled people. It addresses the requirements of the different target groups. Nature educators will find suggestions for planning, preparation, organisation and implementation of guided nature tours. Primarily, these are offers for adult visitors, but of course, they can also be adapted to schoolchildren and groups of young people.

We, as authors, know that accessibility is not yet a reality in many nature conservation institutions. We want to contribute to the implementation of more accessible solutions. We want to encourage educators to use existing offers and possibilities and to show how often small adjustments without big investments can lead to more accessibility, maybe not for everyone, but for many people with disabilities.

The advices in this brochure should be understood as suggestions to approach the topic of accessibility and inclusion pragmatically. We hope that this brochure will also help to break down inhibitions and provide practical orientation, for instance with concrete suggestions for methods.

For more suggestions on adaptations in nature conservation institutions, please also consult the brochure „Self-determined experience of nature“ developed under this project.

This brochure consists of two main parts. In the first part, the user receives some theoretical information whereas the second part comprises suggestions and examples for programmes.

Part I is divided into five chapters. The introductory chapter is followed by general information about legal issues, accessibility, barrier free communication and respectful interaction with disabled persons in chapter 2. This information can help to prepare for the topic and the possible new target groups.








The third chapter describes the main groups of people with disabilities. Here you find some general information about people with motor impairments, the visually impaired and blind, deaf and hard of hearing, as well as people with learning difficulties. A differentiation according to target groups is not universally advocated in pedagogy. However, it should make it easier for nature educators to gain access to the topic and encourage them to develop offers and workshops step by step.

The forth chapter is intended to support the planning of guided nature tours. It contains information on the necessary infrastructure, useful services and support, and how to prepare a tour or programme. Detailed information on different requirements of the target groups is collected under 4.3 „Local Services and Support“. At the end of this chapter, examples of best practice give an idea of how programmes work.

Chapter 5 deals with general aspects of organisation and implementation of guided nature tours and programmes. At the end of the chapter, you will find some hints on self-assessment and participant feedback.

Part II “Suggestions for guided tours and programmes” offers nature educators the opportunity to find suggestions for programmes and actions divided into different subchapters. Those are e.g. “Senses”, “Creative Offers” or “Group Activities”, followed by concrete examples of programmes on different topics, e.g. “Eco-System Lake” or “Bird Watching”.

For orientation on which method or programme is suitable for a specific target group, we use the icon system below. The pictograms listed are not intended to evaluate or certify offers.

 	<ul style="list-style-type: none"> • People who cannot walk long distances • Wheelchair users with possibility to walk for short distances • Wheelchair users who cannot walk
 	<ul style="list-style-type: none"> • Blind people • Visually impaired people
 	<ul style="list-style-type: none"> • Deaf people • People with hearing disabilities
	<ul style="list-style-type: none"> • People with learning difficulties

We invite you to adapt all methods to your needs, the requirements of your target group and different environments.

In addition to this guideline for the adaptation of nature tours to the needs of disabled people, we developed a practice-oriented brochure „Self-determined nature experience“ as a further part of the project. This brochure focuses on the redesign of nature trails and experiences for barrier-free independent use by disabled persons. It includes a correspondent decision matrix to dismantle both physical and communicative barriers and can be found under <https://www.nature-without-barriers.eu/en/self-determined-nature-experience.html>.

This brochure does not claim to be complete. The main aim is to show, how you can check your offerings for barriers and, in some cases, already reduce some with minimal effort.



Picture: Symbols for tactile perception help blind and visually impaired people to find their way around and provide additional information at the House of the Forest Education Center in Stuttgart, Germany.

2. Principles of accessibility

2.1 Legal issues

This chapter focuses on some of the legal issues on which the project is based, followed by notes regarding accessibility, barrier-free communication and a respectful interaction with impaired people.

In addition to the National laws of each country, the project is based on The United Nations Convention on the Rights of People with Disabilities (UN-CRPD, 2006) and The European Disability strategy 2010-2020.

The UN Convention is an agreement which promotes, protects and ensures the full and equal enjoyment of all human rights and fundamental freedoms by all people with disabilities. It promotes respect for their inherent dignity. People with disabilities include those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. This definition underlines the fact that barriers are the problem, not the disabilities. The convention requires countries to involve people with disabilities in decisions that affect their lives.

Since the Convention entered into force, people with disabilities will no longer be considered as deficient and in need to adapt to the given circumstances. They want to be rather perceived in terms of their potential and experiences, that can make important contributions to reach an inclusive society. They no longer have to adapt to society, but society is developed together in a way that ensures participation in all of their fields.

The European Disability Strategy 2010-2020 builds on the UN-CRPD. It sets out a strategy to empower people with disabilities so that they can fully enjoy their rights and participate on an equal basis with others in society. It promotes active inclusion by implementing actions in eight priority areas, such as accessibility, participation, education and training. Furthermore, it aims to ensure that pupils with disabilities benefit from an accessible education system and lifelong learning programmes for all. The European Commission has already launched several initiatives in the field of education, such as the European Agency for Development in Special Needs Education.

2.2 Accessibility

Accessibility is an essential prerequisite for the equality of people with disabilities and their participation in society. The obligation to take appropriate measures to ensure this is important prerequisites for their inclusion.

„Accessibility“ does not only refer to ramps for people with reduced mobility. It also consists in enabling the experience, understanding and discovery of nature through tactile, visual and acoustic representations for people with sensory disabilities and/or learning difficulties. Furthermore, active participation in events such as guided tours and programmes should be possible.

Based on the concept of “Design for all” or “Universal design”, the physical environment, products and services should be designed in such a way that they can be used as easily and efficiently as possible by a group of people with different conditions, abilities, preferences or needs.

In most European countries there are national standards for accessibility in the built environment. Therefore we only mention functional requirements here. The applicable national standards must be consulted for concrete measures to meet accessibility requirements (in Germany DIN 18040-1 „Barrier-free building - Planning principles - Part 1: Publicly accessible buildings“ or DIN 32984 „Soil indicators in public spaces“).

The European Commission has mandated the European Committee for Standardisation (CEN) to develop a standard for accessibility EN 17210 (Accessibility and usability of the built environment - functional requirements). Chapter 19.3 deals with gardens, parks and nature reserves. A technical standard will be developed in parallel. The date of publication of both regulations was not yet known at the time this brochure has been written.

Accessibility has many facets. Thus, entrance fee can also become a barrier for groups of people with disabilities. To reach these visitors, special prices for group offers and discounts for individual visits are recommended.

Finally, accessibility also includes benefits for families with prams and elderly members. This is particularly significant in the light of demographic development towards an aging society.

2.3 Barrier-free communication

In this subchapter, communication means the access to information including printed media and electronic services. In particular, people with sensory disabilities or learning difficulties still encounter barriers in obtaining information if websites are not designed to be accessible, if offers are not clearly labelled or if information in easy-to-read is missing.

Provide information in advance

In order to plan an excursion, obtaining comprehensive information about offers in advance is necessary for visitors with disabilities more than for other guests. With detailed information on websites and tourist offices, preparation can be made according to personal interests and possibilities.

The information provided in advance should enable the visitors to make a clear decision. For example, they should be informed of what may be difficult to handle on site with reduced mobility or with no or reduced sight.

To reach potential guests, it is necessary to keep information available in different formats.

That means offering various media such as leaflets in large print, easy-to-read language or on a barrier-free website. Barrier-free websites are often used by persons with disabilities to get a first impression of offers.

Detailed description of the way

Detailed information on how to get to a destination is of great interest, especially if the place can be reached by public transport. Additional descriptions, e.g. the way from the bus stop to the entrance, are not only advantageous for blind and visually impaired people, but it helps all visitors in orientation. Providing this information is easy and causes no additional costs.

Moreover, there should be information on what makes the experience of nature interesting and exciting for people with different disabilities. These details are supplemented by the length of the route, the duration of the offer and information on possibilities to rest (further see section 4.2.1, 5.1).

Barrier-free website

To allow the visitors the preparation in advance, it is important to make information available on your website describing programmes, infrastructure and special services. Ideally, the website should be designed according to the Web Accessibility Guidelines WCAG 2.1. A website is largely barrier-free for the blind and visually impaired if, for example, font sizes and colours can be changed and it can be read or operated using specific computer aids for the blind (speech or Braille output). Important functions for this include continuous operability with the computer keyboard (without mouse!) and the underlying of all graphic elements with „alternative text“. Many of these elements can be implemented free of charge with standard programming aids.

For deaf people, sign language videos should be available; for people with learning difficulties, the most important information should be provided in easy-to-read language.

Developing and providing online-documents, or simple audio information is easier and has more advantages than making media in different prints or producing and lending complex multimedia-guides. So, anyone can download the information in a suitable format.

Inviting visitors

To invite people with disabilities, it is very helpful to get in contact with their associations and organisations. In the invitation, you should include information on the following points:

- Arrival and departure with public transport.
- Information on parking spaces for the disabled.
- Availability of a barrier-free WC.
- Whether an accompanying person is required.
- Length and other route conditions (road conditions, gradients of more than 6 %, rest stops).
- Duration of the offer.
- Information about available aids, for example, rental wheelchairs.
- If necessary information about outdoor clothing.
- Whether (accompanying and assistance) dogs are allowed.
- Entrance fees and costs for the programme/offer.
- Contact information for inquiries (especially for people with a hearing impairment alternatives to the telephone, e.g. e-mail address or fax number, mobile number for SMS and WhatsApp, Facebook).

When you post information about an event on your website, you should describe in detail whom you want to reach. It is not enough to communicate, that there are offers for people with disabilities. For example, people with hearing impairments need concrete information on communication options (sign language interpreter, written interpreter, or if hearing aid compatible technology is available).

You should also provide information on whether and which other mobile access aids (e.g. Swiss Tracs - motor assistance for wheelchair users to be able to drive up steep slopes) you can provide during an excursion. These should not only be used by groups but also by individual visitors.

In many cases, it is advisable to cooperate with regional medical supply stores, hearing care professionals, opticians or regional associations and organisations for the disabled.

2.4 Respectful interaction

Inclusion means not only that people with disabilities should have the opportunity to participate on equal terms in the life of society, but also to esteem and respect everyone. Treating a disabled person with respect means, for example, not touching, pushing or pulling a person without having asked. In this section you find some general recommendations for a respectful communication and interaction with disabled people. Chapter 4.3 contains detailed information on what to consider when working with a special target group.

In general, it is recommendable to train and sensitise the whole staff or a nature conservation centre/area to ensure adequate service for all visitors. The trainings help to reduce fears of contact and to get in real communication with disabled persons. In this way, a welcoming culture can be developed and supported by all employees. Your guests will feel accepted.

Depending on the content to be transmitted, a training session can last two hours or half a day. Representatives of the interests of people with disabilities will support you. They usually offer this service free of charge. You can find some contacts on our website <https://www.nature-without-barriers.eu/en/>.

It is advantageous if one person on site coordinates measures for the inclusion of new visitor groups, acts as a contact person for this topic and maintains contacts with associations and organisations.

In general, the same applies to dealing with people with disabilities as to others:

1. There is no complex method that you must use to communicate or interact. A respectful strategy is to approach people with disabilities as you would approach anyone of their age or in their position: "Mr./Mrs." plus name.
2. When introduced to a person with a disability, it is appropriate to offer to shake hands. People with limited hand use or who wear an artificial limb can usually shake hands. Shaking hands with the left hand is an acceptable greeting.

When it comes to greet blind people, you can shake their hand if it is clearly offered, otherwise you can ask if a handshake is desired.

3. Address people with disabilities only by their first name if you do the same with everyone.
4. When talking with a person with a disability, speak directly to that person rather than through a companion or sign language interpreter. If you get in contact with people in wheelchairs or small people, try to keep your eyes at the same level by sitting down, if there is the opportunity.
5. Listen attentively when you are talking to a person who has difficulties to speak. Be patient and wait for the person to finish, rather than correcting or speaking for the person. If necessary, ask short questions that require short answers, a nod, or shaking the head. Never pretend to understand if you are having difficulty to do. Instead, repeat what you have understood and give the person the opportunity to reply. The response will guide your understanding.
6. Don't be embarrassed if you use accepted, common expressions such as „See you later,“ or „Did you hear about that?“ that seem to relate to a person's disability. When you try to avoid these terms, your language will turn out to be unnatural.
7. If you offer assistance, always wait until the offer is accepted. Then listen to or ask for instructions. Accept friendly, if someone does not want to take up your offer.
8. It is important for every person that his or her privacy remains guaranteed. This means in case of a person in a wheelchair, that the wheelchair is part of the person using it. Therefore, ask or make an agreement before pushing or pulling the wheelchair. Blind people should not be touched, pushed or pulled without prior notice. The cane or other objects of a blind person should never be moved without prior consultation.

Exceptions are concrete dangers or emergency situations!

9. For emergencies, it is good to have trained personnel on site. This can also be an accompanying person of the group. This person knows the needs of the group. Generally, you should have the information about:

- medical-specialists in the area,
- provision of help and contact for the organisation of local transportation,
- special or free offers for assistance-persons or companions.

10. if you are not sure what to say or do, just ask politely! As a rule, people are willing to help you.

After all: Disability is just one of many characteristics of a Person. For instance, a wheelchair user is a woman and also maybe an employee or mother. Do not reduce people to a disability. Do not see being different as a defect, but as diversity.

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3. Impaired people

3.1 People with motor impairments



In this brochure, the term “mobility” stands for a self-determining overcoming of spatial distances. It is a central function for self-determined participation in social life.

The term „mobility disorder“ or „limited mobility“ leads many people to imagine a person in a wheelchair in front of a staircase. Other movement restrictions can also be classified under the term „reduced mobility“, such as the use of a Pram.

This section focuses on people with motor disabilities. The terms „mobility impairment“, „motor disability“ and „motor impairments“ are used here to refer to people in this target group. Motor impairments is the most visible type of disability.

Motor disabilities are very diverse and, like any type of disability, very individual. Some people can walk, but have difficulty, for example, walking long distances or climbing hills. There are people with limited function of the arms or hands. Some wheelchair users can walk short distances, others can only move around with the help of an electric wheelchair.

Motor impairments can occur as a result of a whole range of causes: from cerebral movement disorders to diseases of the respiratory tract or skin to malformations or the consequences of accidents.

People with different motor impairments are confronted with various difficulties.

Thus, quickly avoiding danger or climbing stairs and curbs can cause problems for people with walking disabilities and people of small stature. Wheelchair users have difficulty overcoming steps or curbs, stairs, steeply sloping ramps or using high controls on vending machines and lifts.

Gripping problems can lead to difficulties when operating vending machines, door opening and stop buttons as well as handles.

People of small stature are often unable to reach control elements and railings over 0.85 m high. They cannot safely use too high seats and seats with large seat depths.

In their everyday life, people without disabilities often face the same or similar barriers as people with reduced mobility. These may be families with prams, younger children or older people.

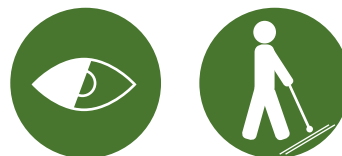
Therefore, removing mobility barriers helps everyone. You will find concrete tips and suggestions for solutions in our brochure „Self-determined nature experience“.

Some numbers: Between 6 and 12% of people with more severe disabilities live in different EU member states. The EU average is 10.1%.

The available data proves the fact that mobility impairments are more abundant than sensory limitations. Roughly speaking, in an average EU country, 57% of all disabled persons have problems with mobility, 19% with seeing, 16% with remembering or concentrating, and 7% with hearing. Those are only indicative numbers.

Finally, the same person may be affected by several disabilities at the same time. The statistics usually do not allow checking this cross-occurrence.

3.2 Visually impaired and blind people



The definitions of blindness and partial sight, as well as the registration criteria vary from one European country to another. Therefore, no definition for „blindness“ and „visual impairment“ is included in this brochure.

Visual impairment includes people who are blind or partially sighted from birth, blind people with residual vision, people who lost sight due to injuries or diseases and elderly people with waning eyesight.

There are estimated to be over 30 million blind and partially sighted persons in geographical Europe. In average, one of 30 Europeans experience sight loss. There are four times more partially sighted than blind persons.

In figures dating from 2010, the World Health Organisation (WHO) assumes that in Europe there are
2,550,000 blind people and
23,800,000 low vision people, giving a total of
26,350,000 visually impaired individuals.

Sight loss is closely related to old age. One of three senior citizens over 65 faces sight loss. Only few people are born blind or with reduced sight. The majority may acquire a deteriorating eye disease later in life, such as diabetes or the age-related macular degeneration.

Seeing is often regarded to be the central mode of perception. The environment is correspondingly visually oriented. More information is absorbed by the eye in a shorter time than by the other senses. 80% or even more is a frequently mentioned order of magnitude. Most of our learning, perception and experiences are based on vision.

The age at which a person goes blind plays an important role. It has a significant influence on the possibilities of experience, recognition and imagination of things and facts. A birth-blind person grows up without optical experiences. For this person it is a conscious cognitive process to realise that most of the other human beings have another level of perception, which is hardly to imagine for a blind born person.

A later blind person often feels his limited perception as a loss. These people have a multitude of visual experiences and memories that they try to preserve, implement or compensate. Later blind people have spatial ideas and know colours. However, these memories of optical phenomena fade with time.

A common misconception is that blind people cannot see anything at all. This is of course true for some of them. Many others have some perception of light and shadow, have blurred vision or can only perceive a small section of environment because they look like through a tunnel.

A much larger group is represented by people with visual impairments. This refers to people whose vision is significantly impaired, but who still manage well in everyday life.

The group of visually impaired people is undoubtedly the most heterogeneous. Every visual impairment is very individual depending on its cause. In addition, vision can vary in different situations, for example, depending on time of day or lighting.

Deafblindness is a disability that combines in varying degrees both hearing and sight loss. This results in a severe disability with a high risk of isolation and exclusion. This disability requires therefore specific actions and solutions. As recommended in section 2.4, representatives of the interests and associations can advise on these and other specific aspects.

Finally, everyone copes differently with blindness. Some people simply adapt to the circumstances, others do not accept the limits of blindness and do everything they can to overcome them, depending on their character, social environment and abilities.

3.3 Deaf and hard of hearing people



Hearing has a very important role in our lives. It constantly transmits stimulus in all directions. It guides visual perception. It mediates moods. It prepares us for upcoming events. It is the basis for establishing and keeping contacts. It raises curiosity. In addition, it is very important for speech. Therefore, if hearing is damaged, it can cause serious problems in the ability of people to talk and communicate with words.

“Hearing impairment” is an umbrella term. It includes hearing disability, hearing deficiency and hearing loss. The concept of hearing impairment can be interpreted in several ways.

According to the medical term, hearing impairment is the loss of the ability to hear. Levels of hearing impairment vary from a mild to a total loss of hearing. It involves hearing loss which becomes evident at birth (congenital) and also which appears later in life.

According to the Individuals with Disabilities Education Act (IDEA), “hearing impairment is a hearing loss, whether permanent or not, that affects a child’s educational performance. This definition includes children who have the capacity to receive some auditory stimuli, including speech and language. This capacity is known as residual hearing, which can be supported by the use of hearing aids.

Deafness is a severe hearing impairment that impedes the child’s processing of linguistic information through hearing. A student with this condition cannot receive sound in all or most of its forms.”

According to the degree of hearing loss, hearing disabilities can be classified as follows:

25-40 dB of hearing loss – mild hearing loss (it is hard to understand silent speech);

40-60 dB of hearing loss – moderate hearing loss (it is difficult to hear normal speech);

60-90 dB of hearing loss – severe hearing loss (it is difficult to hear loud speech);

90-100 (110) dB of hearing loss – profound hearing loss (hears only with amplification);

above 100 (110) dB of hearing loss - deafness (it is difficult to hear even with amplification).

Estimated 119 million people in Europe are hard of hearing. According to WHO, over 5% of the world’s population has disabling hearing loss (432 million adults and 34 million children). It is estimated that, by 2050, over 900 million people – or one of every ten people – will have disabling hearing loss.

Hearing damage may have very different consequences. As a direct effect, it can cause difficulties to learn a language and to speak, but, important to know, it does not influence intelligence or intellectual abilities of a person.

People with congenital hearing impairment sometimes find it difficult to grasp the content of complex written information. In this case information can also be communicated in Easy Language. Nevertheless, the language of deaf people remains sign language. The use of Easy Language in communication is only a complementary offer. If the hearing loss occurs after the natural language acquisition, written language is usually understood.

However, it has impact on social adaptation skills since acoustic information related to environmental changes are incomplete due to the damage of hearing.

For people with hearing impairments, it is difficult or impossible to respond adequately to acoustic events or acoustic changes in the environment.

Contact and social communication skills are often disturbed.

In conversations with the hearing impaired, supportive gestures as well as direct speech, in which eye contact and a clear view of the mouth are guaranteed for lip receptivity, contribute to understanding. The forms of communication used are spoken language, spoken language accompanied by sign language, spoken language supported by sign language or sign language. Sign language helps to transmit and interpret information when understanding spoken language is not possible. A sign language interpreter is a great help for a deaf person contacting hearing persons.

Short information can also be given easily and straightforwardly with a piece of paper and pen, by SMS, with pictures or by pointing to objects or via tablet.



3.4 People with learning difficulties

The spectrum of learning difficulties are diverse and ranges from learning disorders such as Dyslexia (reading and spelling difficulties), ADHD (Attention deficit hyperactivity disorder), or Auditory Processing Disorder (APD) to age-related difficulties (Alzheimer's disease, Dementia) and severe loss of intelligence. Usually, it is possible to detect most of them during the school years. Nevertheless, some people are never evaluated properly and have to go through life without knowing the reason of their difficulties in learning, staying focus and other issues.

In this brochure, the very general term „learning difficulties“ is defined more narrowly. It refers to people with a focus on mental development.

According to the German Federal Statistical Office, around 1.5 million severely disabled people with mental or psychological disabilities and cerebral disorders live in Germany (2014).

Typical for people with learning disabilities are e.g. delay in oral language development, deficits in memory skills, difficulties in learning social rules and problem solving, as well as delays in the development of adaptive behaviours such as self-help or self-care skills.

People with learning disability learn slower and may take more time to develop skills. The learning process requires more repetition as well as a good organized knowledge and information transfer.

Many people with learning disabilities can lead relatively independent lives if they receive adequate support. The greatest obstacles arise from the social environment and are often associated with prejudice, fear or lack of acceptance.

It is of a great importance to take people with learning difficulties seriously and offer them the same quality and services as all other guests. Attentive and friendly conversations with open-minded behaviour, direct personal contact, and natural affection without excessive patronising are important prerequisites for success in working with persons with learning difficulties.

Places for nature experience suit perfectly for learning and discovering, for encounters and inclusive activities. By considering some points, an active participation of people with cognitive and/or communicative impairments during excursions in nature is easy to realise.



Picture: The team of „Nature without Barriers“ during an awareness workshop in the Donauauen National Park, Austria.

4. Planning and preparation

4.1 Accessibility check

Feeling and experiencing nature is a special need for many people. For people with a disability, the access to nature is not always easy. That is why creation of barrier-free offers is important. Those make enjoying, experiencing and discovering nature possible also for impaired persons.

Nature trails offer possibilities to discuss different topics. They give a chance for new perspectives and exchange about experiences in nature.

In order to make guided tours attractive, it is important to create them as interactive and multi-sensible experiences close to nature, no matter if a tour in the forest or at a lake is planned.

Generally, when preparing tour offers for people with disabilities, it is recommendable to get in contact with the appropriate representations of interests or associations. They dispose about extended knowledge you will benefit from. They can help you to get further information and support your project. It could also be helpful to involve an accessibility expert recognised by disability organisations.

When planning and implementing inclusive projects and programmes, it is important to remove or at least mitigate physical, communicative and informative barriers, and do not create new ones.

Three easy rules will help you to conduct the first check of an offer on accessibility:

1. The wheel-foot-rule – Can your offer continuously be used by wheelchair-users as well as by walking individuals?
2. The two-senses-rule – Is the information you give perceptible through at least two of the senses (seeing, hearing, feeling, tasting, smelling)?
3. The kiss-rule – Can you offer information using the approach “keep it short and simple”?

Those three rules do not substitute a detailed review of the situation in your institution, but they show you the first steps how to start the planning of guided tours for impaired people

A further step can be to check existing offers and to consider which groups of people with disabilities could use them. What measures are required to adapt the offers if necessary?

After that, the infrastructure in your institution could be scrutinized: How easy is it to reach the nature conservation centre/area by public transport? Is there a WC for the disabled?

In all planning, special attention should be paid to a continuous service chain. This means, for example, providing comprehensive information in advance so that a visit can be planned and prepared.

You will find a detailed explanation of the continuous service chain (Arrival, facilities, rest facilities, restaurants etc.) as well as a matrix for an initial test in our brochure on self-determined nature experience.

When implementing accessible solutions, you should start with a project which is easy to manage and can be done in a short time. Thus, you achieve results that motivate you to pursue the topic.

4.2 Infrastructure

4.2.1 Accessibility of nature conservation centres/areas

In this section, „infrastructure“ refers to both infrastructure on site and public transport connections.

Even if a nature conservation centre building meets the highest accessibility standards, it may be difficult to get there, e.g. the distance from the nearest bus stop or train station is very long or stairs make it difficult to get from the car park to the building.

Blind and visually impaired people often use trains and buses, especially when they travel individually. For them, good connections are very important in order to take advantage of offers such as guided tours.

If the appropriate infrastructure is not available, you should organise a transfer or choose a meeting / starting point that can be easily reached by public transport.

The use of buses with low-floor technology in public transport offers people with limited mobility the possibility to use them and means more comfort for all other guests, e.g. families with prams. Buses that are equipped with a light and sound warning system as well as a display panel for information help people with hearing impairments in particular.

Indications of disabled parking spaces are not only important for people with motor impairments, but also for blind visitors, as some of them have a disabled parking permit and are allowed to use disabled parking spaces.

4.2.2 Buildings

As already mentioned, every European country has building regulations for barrier-free infrastructure.

As this guide focuses mainly on guided tours, we will only list a few important examples and alternatives on how to move towards accessibility with small steps. Further ideas for solutions can be found in our brochure „Self-Determined Nature Experience“. Please note the necessity of a safety check for all measures. A larger-scale conversion measures can and should be planned into the next maintenance round. In case of doubt, always check whether offers that are difficult to handle, e.g. for wheelchair users, may be suitable for other user groups!

Ramps should provide alternative access to the nature conservation centre. Their inclination must not exceed 6%. If it is not possible to install fixed ramps, mobile ramps can be an alternative.

Instructions for the construction of wheelchair ramps are available on the Internet with total costs starting at about 15 euros. The self-built ramps should always undergo a safety check. Medical supply stores also have ramps to overcome smaller and larger obstacles.

Slopes in the terrain and the condition of the path should also be checked to see whether they can be mastered with a wheelchair in this context.

Toilet facilities, elevators and other rooms must allow a wheelchair to turn around. If this is not possible in your institution, make this information available on your website as well as in your information material.

Check whether the rooms can be used by other user groups. People with impaired vision or hearing can use standard rooms as well.

Door knobs and control buttons in elevators must also be accessible to everyone. This means lower positioning as well as correct horizontal mounting so that everyone can see them and does not have to bend or turn around. For people with a hearing impairment, it is recommended to use both, light and sound signals in elevators and in case of alarms. Apply a continuous multi-sense principle. Escape routes must be marked clearly.

The counter desk in the entrance area should be accessible by wheelchair and at least at one point should be low enough for wheelchair users and people of small stature to get close enough and maintain eye contact when speaking. Alternatively, the staff can be instructed to come to the guests in front of the counter instead of leaning over it.

Information on directions in easy understandable words and pictograms, placed in clearly visible places helps people with learning disabilities as well as deaf and hard of hearing visitors. Coloured, tactile plans are useful for blind and visually impaired people and interesting for everybody.

A good lighting in all rooms is helpful for visually impaired guests as well as for deaf and hard of hearing visitors. Deaf people can better follow the sign language interpreter, hearing impaired people benefit when reading lips, and visually impaired people prefer good lighting in combination with high contrasts when it comes to orientation in a facility. In the end, well lit rooms are a benefit for all guests. Here, it may be worth checking whether stronger lamps can be used.

If possible, use mobile furniture elements (chairs, benches etc.) which allow every person to sit in the proper hearing and visibility distance.

It is important to install induction loop in larger rooms and to ensure the application of transceivers.

Finally, there is no doubt that an easily understandable guidance system, good lighting inside the nature conservation centre and ramps instead of steps offer additional comfort for all visitors.

4.2.3 Toilets

The importance of a barrier-free toilet is often being underestimated. It belongs to the minimum equipment of every institution open for visitors. There are clear national and international standards for an accessible WC. Here, we can encourage every institution to deal with this question in more detail.

The toilet seat must be ideally adjustable in height. Lateral distances to the walls at the toilet bowl for wheelchair users, general movement areas for the wheelchairs, height of the sanitary objects, so that a transfer from the wheelchair to the toilet is possible and it is possible to drive under the hand basin. Each Nature park has to consult the respective National standard here.

Barrier-free WCs are not only used by people with reduced mobility. Blind and visually impaired people also often prefer a disabled toilet, as they can find their way around more easily. If there is no tactile guidance system, you may need to accompany blind people to the toilet door and briefly explain where the toilet or sink is located in the room.

For people with a visual impairment, it is important to provide signs and text panels with high-contrast writing. This also applies to the signage on toilet doors.

On a large site, unisex cabins (compost or dry toilets) could be set up, which can be used by all visitors. Here, the euro unit locking system should be used.

Please, remember: access to proper toilets is highly important, as well as the corresponding information on it (signage etc.).

4.2.4 Trails, terrain and vantage points

Safety aspects play a particularly important role in the terrain.

Hiking trails should predominantly be reserved for pedestrians and may only be open to cyclists, skaters or riders on short sections. Vice versa, cycle paths should largely be open to cyclists, crossed by pedestrians as few as possible. The hiking trail must be car-free.

If crossing a busy road during a tour is necessary, the points must be secured with traffic lights, zebra crossings, etc.

Paths built over swamps or reed beds should have a stable surface and offer protection against falling into the mud or water. They should be wide enough to allow two wheelchairs to pass each other or one wheelchair to turn around.

Well-constructed, high-contrast handrails should be installed at every inclination / slope of the terrain, to support safety.

The surface of the trail should not be slippery, even when it is wet. Sections can be attached with simple aids such as aviary wire.

In order to offer guided tours for blind and visually impaired people, it is not necessary to install a tactile guidance system. Existing path boundaries or edges can often be used for orientation, if they are continuous and can be clearly felt with the blind cane.

The infrastructure of nature trails often includes viewing towers, bridges and information boards. These aspects are covered by the self-check tool for inclusive nature trails „Self-determined nature experience“. However, guides and rangers should be aware of these problems as well.

4.3 Special services and support on site

4.3.1 People with motor impairments



In this section, you will find general information and tips for the design and implementation of excursions for specific target groups.

Visitors with motor impairments repeatedly encounter obstacles that restrict their freedom of movement. Therefore, in preparation of guided tours for this group of people, it is essential to check the planned route in advance. In this way, all barriers can be eliminated. Even a centimetre-high curb can be an obstacle for a person in a wheelchair or for people with rollators.

Rangers or nature guides should know the exact location of ramps, lifts and kerbs (ramps connecting the pavements), as well as barrier-free toilets in order to give guests the feeling of being in safe hands.

It is important to give clear safety instructions (e.g. when staying near water or to prevent wheelchairs from colliding with each other). Collisions can lead to injuries of participants.

The guide can bring equipment for the tour, e.g. a spotting scope for shared use by the group. Remember that the tripod may be difficult to reach from a wheelchair. Instead of books, existing information boards can be used to explain facts. Sharing images through an ad hoc messenger group could be another option.

It may also be helpful to use navigation apps instead of maps.

If printed materials are to be used, a spiral binding makes it much easier to handle them in a wheelchair.

In some cases, bicycles can significantly extend the range of activity of people with motor impairments. Bicycles can be an ideal substitute when a longer walk is out of the question. Those who are unable to use a conventional bicycle due to certain mobility restrictions can make use of appropriate technical aids and special bikes.

In some cases, bicycles can considerably extend the range of action of people with motor impairments compared to wheelchairs. Bicycles are an ideal means of transport when a longer walk is not an option. Anyone who is not able to use a conventional bicycle due to certain mobility impairments can fall back on appropriate technical aids and special bicycles.

Bicycle wheelchair systems or hand bikes can either be provided or brought by the visitors (see section 2.3). In this case, it is important, that the bicycle can be easily moved from the parking space to the trail.



4.3.2 Visually impaired and blind people

When receiving a person with a visual disability, always identify yourself and other people with you. When conversing in a group, remember to identify the person to whom you want to speak by pronouncing his or her name.

A blind person should be addressed from the side or the front. Most blind people will not react when a voice comes from somewhere behind.

Let the blind person know when you leave your seat. In this way, you can avoid your counterpart talking to an empty chair because he or she thinks you are still there. This is very unpleasant for a blind person. Better communicate more than less.

If you want to point something out to blind and visually impaired guests, it is helpful to give specific information about the direction to look, such as „the pond is five steps to your right“, not „There is a pond over there.“

Directions can also be given by the dial: „The pond is five steps at two o'clock.“ Description of what can be seen to the right and left is useful as well.

Detailed information about the trail and hazards in advance is important for a safe and relaxed walking:

„In two metres, a slope begins, five metres long, leading down into a hollow.“ „Four metres to your right, there is a tree that we pass on our left.“

„Three metres in front of you, there is a branch at head level.“

Especially for blind, it may be interesting to receive information about sights and special features in the nearer surrounding as well as about special sounds and smells. For example:

„We now enter a bridge over a dry river. To our right, there is a dense deciduous forest with many tall trees. To our left, there is a meadow that was recently mowed.“

You can also describe colours. Many blind and visually impaired people are interested in the colours in their surroundings because they know them from their memories or can at least perceive them with their remaining vision.

Ask if your descriptions are helpful.

You can offer your arm to guide the blind when orientation becomes difficult (e.g. on uneven terrain). Ask if support is desired, the person addressed will explain how he or she would like to be supported (guided).

In information materials and on the website, it should be pointed out that guide dogs are allowed. Guide dogs may accompany their owners anywhere, including supermarkets and doctors' surgeries. Only in exceptional cases those may be refused. Always ask the owner for permission before touching or stroking the dog.

If you want to send a written invitation or information to people with visual impairments or to one of their advocacy groups, send it by e-mail. You can copy the text directly into the e-mail or send it as an attachment. This makes it easy for recipients to access the content and distribute the invitation.

Word and PDF files, which are poorly structured and formatted, are good to handle. If there are pictures in the invitation, describe them with a short caption („The picture shows...“).

Attention: Scanned and handwritten documents cannot be read by a screen-reader!

4.3.3 Deaf and hard of hearing people



To get her or his attention you can briefly tap a deaf person. Depending on the situation, contact can also be established by switching the light on and off, stomping on the floor, patting on a table or striking arm movements.

An uncomplicated communication with hearing impaired people often works quite simply with a piece of paper and a pen. If you are communicating this way, it is recommended to use simple language and simple structures. Furthermore, sketches can help your guests to understand your message.

For further communication, it is important that you always make eye contact with the visitors when speaking. A certain distance to your conversation partners is necessary so that they can see as much of your body as possible, because gestures and facial expressions are expressive information carriers and can sometimes say more than words.

Lip reading can be a great help for deaf and hard of hearing people. However, not all deaf people are familiar with this technic. For those, who do lip-read, be sensitive to their needs while speaking. Place yourself so that you face the light source. Light should come from various directions, not just from above. Speak at normal volume, clearly and not too quickly. For some people who have hearing problems, it may be helpful to tell a few words into their ears, i.e. to the hearing aid or the cochlear implant.

Further advices:

- Keep hands, cigarettes and food away from your mouth when speaking.
- Moustache and beard might be confusing.
- Noise and external sounds make communication difficult. Try to reduce background noise as much as possible.
- To make it easier to understand, use short and concise sentences.

When spoken communication is impossible or not desirable, sign language can be used. In order to communicate to a hearing impaired person, who uses sign language, it is recommended to book a sign language interpreter to be available in the given communication situation. As there are different types of sign language (subchapter 3.3), it is also recommended to get information about the preferred way of communication in advance.

Actually, you do not need to train a sign language interpreter in your institution.

An organised group often brings a person to interpret. If possible, you should also offer the option of booking this service on site. Ask experts in the region whether they would be generally available to accompany excursions on specific days. Additional costs must be indicated, but are usually not an obstacle. Those are usually gladly borne by the participants if the offer is right.

If a sign language interpreter is on duty: When speaking, do not look at the interpreter but at your conversation partner and choose the direct salutation with „you“. Your conversation partner has the main role, the interpreter the secondary one. This is no discourtesy to the interpreter.

If it is not possible to solve on-site interpreting, video remote interpreting services can be used. Nearly every smartphone has a front-facing camera, which is suitable for video interpretation, only internet access is needed.

Sign languages vary from country to country. Therefore, an interpreter might be needed if you interact with a foreign person.

It is a kind gesture, if you learn some important phrases and words in sign language in advance.

4.3.4 People with learning difficulties



People with learning difficulties usually travel in organised accompanied groups. Therefore, they are particularly open to group offers such as guided hikes or boat trips.

When you talk to people with learning difficulties, try to speak in simple and understandable words. Technical terms should be avoided or explained. Easy language (or easy-to-read) is recommendable. It has its origins in disability assistance and is the extreme form of language simplification. Simple language is a balanced mixture between easy-to-read and technical language. The so-called simple language explicitly addresses the general public. It ensures that the text remains clear in content, linguistically correct and aesthetically appealing.

Thus, in Germany, rules for easy-to-read and simple language are maintained and published by the Netzwerk Leichte Sprache (German for Network Easy Language).

In the European Union, there are several seals that indicate easy language. These may usually only be used on condition that the text has been checked and understood by people with learning disabilities.

The European organisation Inclusion Europe has designed a logo for easy reading. When the logo appears on a document, it means that the document is easy to read and understand. Based on the Common European Framework of Reference for Languages (CEFR), the capito® network has also further developed the „Easy Reading“ label for three levels: A1, A2 and B1.

Many other visitors benefit from offers in easy-to-read and simple language. These include foreign guests, people with reading difficulties and children who can understand complicated matters better this way.

If you conduct an excursion for people with learning difficulties, listen carefully, make sure guests understand you, and repeat important information. Use pictures and pictograms for support.

The consideration of following points can help you to get interest and activate the guests:

- Adequacy of questions and information (relevance, scope),
- Previous knowledge of the participants,
- Breaks between given information,
- Encouragement and congratulations,
- Delegation of tasks to participants,
- Avoiding competition,
- Avoiding distractions,
- Avoiding parallel conversations,
- Use of different response formats (oral, written, gestural),
- Scheduling more time for activities,
- Conflict management,
- Sending information and questions to the participants in advance, if wanted.

Always create room for feedback. This works in an uncomplicated way, e.g. with the help of a smiley scale on which approval, rejection or non-decision can be signalled (see e.g. “Talking Mats”).

People with learning difficulties sometimes show behavioural problems that can be challenging and sometimes destructive. In such cases, it is important to ask the accompanying person for support.

The use of practical exercises or animal models can also help to defuse such situations.

In the following, you will find suggestions for a varied and low-conflict tour:

- Prepare a code of conduct for the group.
- Plan alternations between attention periods and movement.
- Divide tasks into small portions.
- Ensure that the task is understandable by asking the participant to rephrase it.
- Provide visual aids.
- Plan break times.
- Prepare a small dictionary for interesting/new/complicated terms.
- Control the work and give feedback.
- Promote twinning and pairing.
- Provide a list of steps to follow in realising tasks.

Patience, the willingness to repeat explanations and to make sure that the contents have been understood are important prerequisites for a successful work with guests with learning disabilities.

These general recommendations also apply to offers in nature.



Picture: For a long time a matter of course: Ranger tours with translation into sign language in the nature experience area „Wild Kermeter“, Eifel National Park. A sign language interpreter translates the explanations of a guide for hearing-impaired visitors.

4.4 Best practice examples

4.4.1 Eifel National Park (Germany)

The Eifel National Park has been a reference for inclusive nature experience in Germany for years.

The national park gates (entrance portals) are information points, which offer various exhibitions on the themes of the Eifel National Park. The park gate called Höfen is one of five facilities of this kind. Here, all exhibits are accessible in Braille.

The barrier-free nature experience space “Wilder Kermeter” allows access to nature without obstacles. The stations for wildlife observation and guided hikes address people with disabilities in general.

The „Kermeter“ (mountain ridge between Gmünd and Heimbach) forms the ecological heart of the national park. There, visitors stroll through mixed forests of copper beeches, which develop back into second-hand wilderness without human intervention.

In addition to a barrier-free network of trails, the nature experience area includes vantage points, fascinating panoramic views of the lake landscape and the nature discovery trail „Der Wilde Weg“. There, ten mostly interactive stations along the 1.5 km long trail provide information about wilderness, forest development and biological diversity in the Eifel National Park.

There is a bench about every 250 meters. Additional sensory couches have been set up at four locations. Here, visitors can enjoy the view into the treetops, listen to the sounds of nature or simply relax. At the Kermeter rest area, the Hirschley vantage point and the Wilden Weg re-search station, there are tables for resting.

Visually impaired hikers are being completely guided by tactile systems. The vegetation edge can be felt along the path and serves as a guide strip. At locations of benches and signs, attention fields run across the path. All information in the Wild Kermeter is available in raised capital letters and Braille or acoustically. A leaflet on the Wild Path is also available free of charge in Braille.

The exhibition “Wildnis(t)räume” (German for wilderness areas, wilderness dreams) can be experienced by everyone with all senses. More than 50 touch installations invite the visitors to touch. Scents can be sniffed out and over 30 loudspeakers give an idea of the „Sound of Nature“. There is plenty of seating options and enough space for a wheelchair or pram. A tactile guidance system shows the way and all information is available in Easy Language, raised script and Braille. Media guides that can be lent free of charge offer an audio description and translation into German sign language. Mobile sound amplifiers are available. Tactile overview plans help with spatial orientation.

Rangers and forest guides regularly attend advanced training courses on the subject of accessibility. They are trained in making guided tours attractive for people with and without disabilities.

4.4.2 Barefoot-park Beelitz-Heilstätten (Germany)

The 60 stations on the three colour-coded circular trails offer a nature experience with all senses. Two of the stations on the red circular trail have been designed in such a way that they can be experienced particularly well without seeing: „Blind Journey“ and „Touch and Smell Boxes“.

A functioning and comprehensible signpost system is available, travel directions are well described and a pick-up from the station or stop is offered.

On the webpage of „Brandenburg barrierefrei“, the necessary information is accessible in Easy Language.

Guided tours for people with learning difficulties and blind and visually impaired people are offered.



Picture: In addition to guided tours for the blind, visually impaired and people with learning difficulties, interesting alternative solutions for mobility were created in the barefoot park.

4.4.3 Naturpark Kaunergrat (Austria)

Especially for people with motor impairments, a variety of offers is provided here. It is possible to rent useful equipment such as handbikes, monoskis and cross country ski sleighs. To reach more elevated beautiful spots like Gepatschhaus, Falkaunsalm, or Aifneralm, Swiss Tracs (motor assistance for wheelchairs to be able to go up steep slopes) are available as well.

The bog and natural monument Piller Moor may be explored on a 700 m long wooden boardwalk, which is designed as an educational walk with information displays.

Swiss Trac users can go up to the restaurant Bergrestaurant Sattelklause, which is located at 1.900 m. Alternatively, visitors can take the 4-seat-chairlift, whereby it is possible to bring Swiss Trac, wheelchair or pram. Close to the restaurant, you can find an educational trail about the native fauna, which is easily accessible. To go down to the valley, it is possible to use mountain carts – this also applies to wheelchair-users!

The glacier region Kaunertaler Gletscher has been known and appreciated as a skiing area by people with motor impairments for years, as it is possible to reach the cable car, lifts and ski slopes from the car park with disabled parking without barriers.



Picture: Barrier-free trails in the Pillarmoor offer wonderful experiences for young and old..

4.4.4 Herb Valley, Zánka (Hungary)

The Herb Valley is an exhibition park and educational centre with the aim to introduce the herbal flora of the Balaton Uplands in an interactive and experience-focused manner. There are interesting and attractive programmes and services for tourists, families, school groups, alternative practitioners or herbalists provided here.

In the Balaton Uplands, herbs are picked by hand, carefully selected and processed by traditional methods. Visitors can participate in the collection of herbs and see, how herbs get processed. At the tea shop, special herbal teas and syrups can be tasted.

The aquatic garden, the sensory garden and the relaxation grass are designed to further enrich visitor experience.

The exhibition centre and the garden can be accessed by wheelchair-users. There are ramps for an easier access. The toilets are barrier-free. In the sensory garden, the herbs are planted in raised beds. This makes it easy for wheelchair users to touch and smell the plants. It is planned to use info boards to provide information on the herbs and their impacts.

Special programmes for impaired people are offered. Those include e.g. introducing spices and other aromatic plants in the interactive smell-store, as well as tasting fresh plants and teas.

You can find more examples in the knowledge pool on <https://www.nature-without-barriers.eu/en/>.



Picture: Herbal valley Zánka presents native wild flora of the Balaton highlands in an interactive and barrier-free way.

5. Realising guided tours and programmes

5.1 Information in advance

When developing offers for people with disabilities, „thinking out of the box“ is particularly important: Which nature education methods can be easily used for which groups? What opportunities arise for individual groups? For blind people, for example, even a meadow can create a feeling of wilderness for them, even if the road is only a few metres away. On the other hand, bat excursions are less spectacular for them, because for many of them darkness is less exciting than for sighted people. All measures that have to do with hearing are dropped for the hearing impaired for the time being. What is left? You will find methodological suggestions and ideas for excursions in the second part of this brochure.

Do not hesitate to check if some of your existing offers are suitable for one of the groups. Remember: well informed is half the battle!

The following section provides information that is particularly important for a good preparation and can help to design a suitable framework for each excursion. In the annex, you will find a checklist for the exchange of information in advance. It highlights the main points important for the preparation.

Disabled people often travel in groups. The journey to and from a guided tour is usually organised by the participants themselves.

You should ask about the number of guests with a disability, the kind of disability, the age of people, as well as for the number of companions.

Arrival / departure

The arrival and departure details should be shared by both sides:

- Where and when the organisers meet the group?
- Whether the meeting point is accessible?
- How the participants will be moving around in your institution?
- How many people does the group consist of? How many of them are assistants or accompanying people? How many wheelchair users?

If there is a possibility of transfer or pick-up, if you can book an assistance service, provide this information.

If impaired people arrive separately to the venue, by car or public transport, it is important to give the exact address, the exact name of the train or bus stop. Providing a map can also be very helpful (further see sections 2.3, 4.2.1).

Preparing the programme

Ask if the group wants an indoor or outdoor activity.

You can make two concrete suggestions for tours or programmes based on the possibilities, interests and wishes of the group. It is helpful to prepare a concept including all actions and activities from the arrival until the departure of the group. In this way, you can assess, if things are coordinated and planned well.

The length of the trail to choose depends on the possibilities of the participants. It must be announced or agreed in advance. In case the participants overestimate their abilities, there should be a shorter alternative. Further information on the nature of the route and the route profile is required:

- material of the path (e.g. dirt road, grass, wooden boardwalk, paved surface, asphalt),
- length and width of the path, including shoulders and roadsides,
- obstacles (tall grass, tree roots, stones, mud or rain puddles, overhanging branches),
- other users (groups of pedestrians or bikers, cars or horse carts),
- gradients and descents (length, percentage increase), alternative routes,
- stopovers (benches, viewing points).

Plan rather fewer stations or topics. People with motor disabilities need more time to move, blind people need time to explore models or material with their hands. Hearing impaired people first follow signed information and only then look at the objects. People with learning disabilities need time to understand. More time has to be planned than for usual guided tours.

The whole staff of the nature conservation centre/area should be informed that a group of people with disabilities is expected.

In order to discuss details of a guided tour in advance, get in touch with the contact person of the group you are expecting. For you as a guide or ranger, it can be important to know the expectations and requirements of the group in advance in order to design the offer accordingly.

5.2 Conditions for guided tours

Conditions of the terrain

For all guests, it is essential to ensure road safety, e.g. no overlapping of hiking and cycling paths or no crossing of busy roads.

If a path or its section is expected to be used also by other groups (e.g. travelling by bikes) and alternatives are not available, it can be helpful to ask a colleague to accompany your group. In this way, one person can lead the visitors while the other secures and, if necessary, communicates with the groups or people around.

The planned routes should be checked for possible dangers one day before the offer. Watch out for narrow places, roots or stones. Remove larger obstacles such as branches. Hanging branches are often not noticed by blind people because their attention is concentrated on the floor area, especially when using a white cane.

At viewpoints, care should be taken to ensure that interesting points can also be seen from the lower perspective of wheelchair users or people of small stature.

For blind and visually impaired people, it can be rather attractive to deviate from the trail to walk cross-country as part of a guided tour. If the ground will be difficult to walk on, it is advisable to ask the participants to bring a trusted companion. He or she can help in case of obstacles or steep stretches of trail. However, such plans should be discussed with the visitors beforehand.

Walking in impassable terrain requires a lot of concentration despite all the tension. Thus, an excessively long „off-road“ route should not be chosen (reference ca. 45 - 60 minutes pure walking time - depending on the wishes of the group).

During the tour, the attention of deaf and hard of hearing people must be consciously drawn to possible dangers. They may not always have 100% vision of obstacles, as they concentrate on lip-reading through eye contact (even if sign language is offered). Using maps can also be useful for this group of visitors. In the map, the route can be shown and pursued.

Background noises and environment sounds can be interfering for some people with hearing disabilities. Therefore, find quiet places for explanations. For many hearing impaired people, it is still difficult to perceive the twittering of birds, the sounds of animals or the splashing of water despite the use of hearing aids. For them it can be helpful to listen to sounds separately in the visitor centre after the tour.

People with learning difficulties do not necessarily face physical barriers. Usually, they do not need special aids. As already mentioned, they primarily need more time and rest to understand and react to information.

Size of the group

In general, it is recommendable to keep the group of participants with disabilities smaller than usual.

Blind persons need time to touch objects and materials. A number of six to ten people per group plus the accompanying people is suitable. Partially sighted participants are able to experience more objects during a tour than blind persons because they still use their ability to see. Here, you can work with a larger number of people.

For groups of people with hearing impairments, the group size can reach up to 15 participants. In a larger group, it is more difficult to understand the information heard or seen. It has proven to be useful to bring together people with an equal degree of hearing in one group.

The group size of visitors with learning difficulties depends on their perception and concentration skills. Smaller groups allow a slower pace and offer individual attention to each guest. A maximum of six to eight visitors per group is advisable.

5.3 Recommendations for guided tours

Guiding people with disabilities is not much different from guiding other audiences. However, it is important to know about the possibilities and the fortitudes of disabled people to create an interesting and exiting experience based on the needs and wishes of the group, where all senses are involved.

For all guided tours, you can generally take in consideration the following facts:

- Choose a meeting point that all participants can reach easily, either independently or accompanied. It may be even the bus stop. It turned out from experience, that it is good to be there on time before the first visitors in order to give them orientation.
- Use a wording, that is uncomplicated, natural and easy to understand, especially when working with people with learning difficulties!
- Offer tactile experiences such as tree-bark, moss, leaves or soil. If it is not possible to touch like in case of insects, larvae or frogs, you can use models for substitute to show the body shape and other special features.

Not only the hands can be used to feel something but also the skin, feet, cheeks or lips. Temperature, wind or moisture can be perceived. Be careful with some plant saps (hogweed) or with some amphibians and caterpillars, which can induce irritations on skin.

Tactile material can be used in working with each of the target groups. It is important that all participants have the possibility to touch or to keep in hands the material you are talking about at the same time. So, all share the same experience.

- Offer possibilities to listen to nature such as the sounds of birds, frogs, insects, water and wind. If it is not possible, downloaded sounds from the internet can be used as substitution. You can also produce sounds with different things to know about their characteristics. For instance, one can hear if the ground is dry or wet.
- Create an experience to smell. Smells can tell something about usability or danger of things. Fresh herbs one can eat have a good smell. Also leaves or wood can be used to offer smells.

Smell-experiences can be used in working with any of the target groups.

- For a taste experience you can work with fruits or herbs. You can prepare salads, tea or jam. In this context, it is necessary to ask about possible allergies of the participants.

If it is possible, ask a person with a disability to hold the tours or programme! As experts in their own disability, they know about the needs of the audience. Of course, you can also hold the tour together with him or her.

At the beginning of a tour / a programme, introduce yourself to the audience and the participants introduce themselves to you. You should make an agreement about to be on first name terms or not.

To remember all the names, you can make simple nametags from masking tape.

Then introduce the tour or programme to the audience, ask for the visitors' expectations and make sure, that it is all right for everyone. That also applies to each of your actions: always ask if someone wants to take part or not. Stay in touch with the participants.

It is not always good to mix people with different impairments in the same group. People with learning difficulties need explanations in Easy Language while the blind often want some more descriptions.

For people with disabilities arriving without an accompanying person, but needing assistance during the tour, there should ideally be trained volunteers who can accompany them on the tour. The volunteer could be booked some days in advance. Only offer this service, if the experience of the respective person in dealing with disabled people is ensured.

Disabled people can also join a regular group. They usually do so as individual visitors. The only condition is that they do not need assistance or have an accompanying person with them.

At the end of your tour, bring the group back to the familiar starting point.

5.4 Self-assessment and participant's feedback

Regular external evaluation and self-assessment is of great importance for any (educational) institution and offer, especially when dealing with a new target group. The aim is not only to develop tailor-made educational offers for the various target groups but also to review and improve the relevance and the quality of these offers on a regular basis.

For this purpose, it is necessary to formulate concrete objectives in advance, which are reviewed after the conception and implementation of the offer / programme.

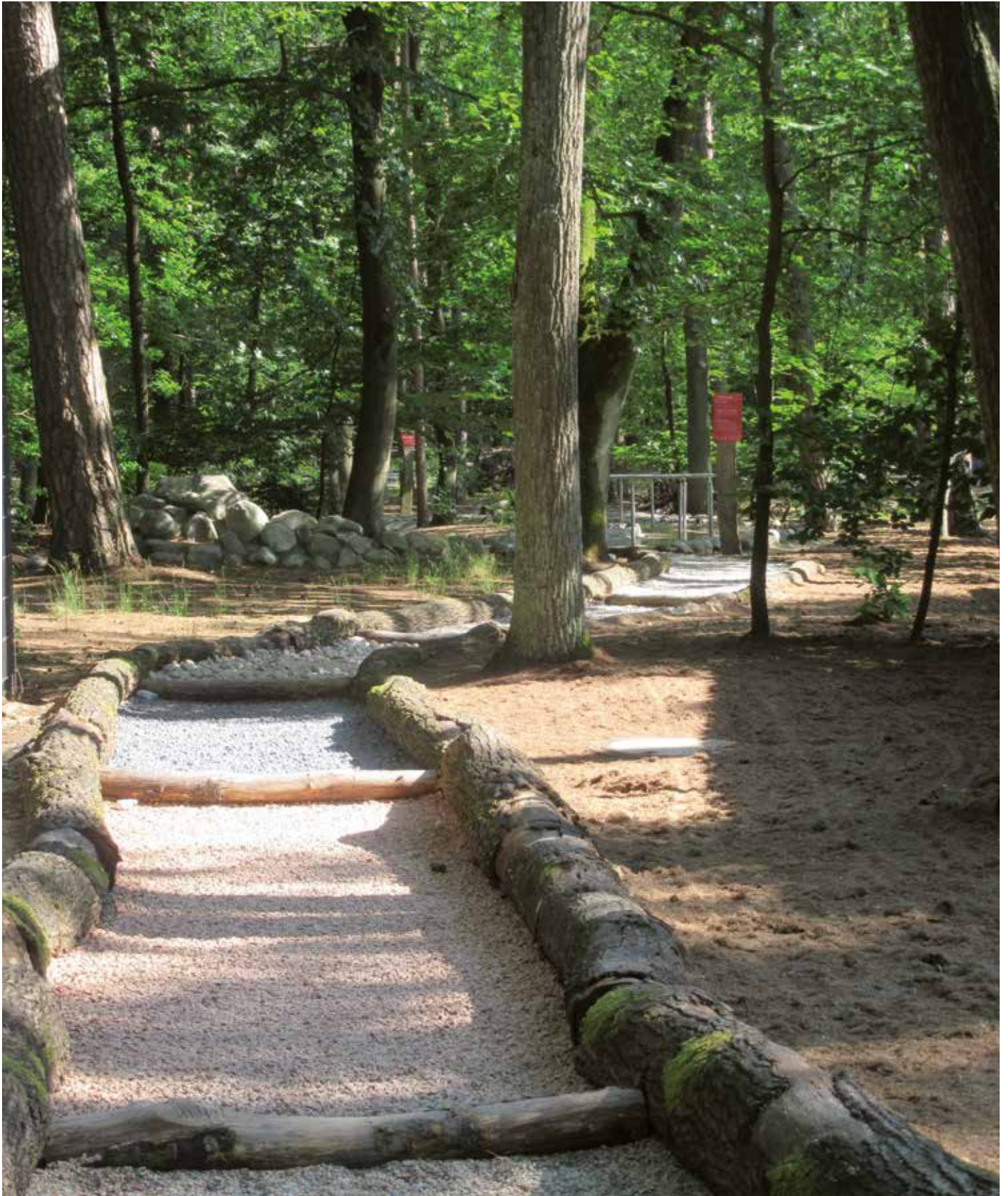
A regular external evaluation is also very important for the further development of your offers. The feedback from participants can help you to improve their quality and increase your competence in working with new, not yet familiar visitors.

For getting feedback from participants, you can use one of the methods, you will find in the appendix, e.g. the flashlight feedback. This can be used during or after a workshop/tour to determine the current mood or opinions in a group. The Flashlight feedback can be used easily in work with all target groups.

Start with the implementation of simple tasks.

In any case, they are worthwhile investments in the future.

We wish you a good time planning and trying new offers out!



Picture: The barefoot path in Beelitz-Heilstätten is a nature experience for all senses..

Checklist 1a: Information in advance

Information given to the group	
Exact meeting point and time indicated?	
Are there parking spaces for disabled people (number)?	
Is there a possibility to pick up the group at the meeting point?	
Is there an assistant service the group can book?	
Is there a toilet facility for disabled people?	
Information about the presence of support devices (ramps, handrails, support handles) and about the width of doors, corridors, the elevator, and space in the rooms available?	
Suggestions for tours and/or activities sent out? Send hearing impaired people and the ones with learning difficulties a short briefing about the programme, which helps them to get prepared to understand the information afterwards given on site.	
Expected level of difficulties at the tour discussed? (e.g. Length and width of the trail, level of gradient, duration of the offer etc.)	
Possibilities for breaks during the tour planned?	
Food and drinks supply on site clarified?	

Checklist 1b: Information in advance

Information you need for the tour preparation	
Details of the stay discussed with the group leader (If the group wants to visit the nature conservation centre/area in connection with an organised travel)	
Number of people with a disability	
Kind of disability	
Age of the participants	
Number of companions / assistance persons and their qualifications (First aid, sign language, etc.)	
Group asked for abilities to move around, special needs and limitations of the group participants (e.g. best way to communicate with visitors with hearing impairments or people with learning difficulties)	
Contact person + contact data	
The planned trail checked beforehand for bottlenecks or other obstacles such as roots or hanging branches	
The staff and other rangers informed about the presence of a group of disabled people	

Checklist 2:

Feedback tools for participants

Of course, you can hand out a questionnaire at the end of the offer and ask the participants to complete it. This work would often have to be done by the accompanying persons. So, it is easier to use other methods to receive a direct feedback from the participants. Here are a few examples, check if one of the following methods fits to the group.

The suitcase reflection

It is not possible to use this method in working with blind visitors, some people with motor impairments, and some with learning difficulties.

- Group size: any
- Material: index cards, pens, a suitcase, a rubbish bin, an office filing basket (it is also possible to use drawings of those items)

The educator/s place/s the suitcase, the rubbish bin and the office filing basket in the circle. They symbolize the following:

Suitcase: „I take that with me“ - positive experiences, situations that I wish to take home with me, ideas, inputs etc., which was great, which I want to remember later on.

Rubbish bin: „I'll leave that here“ - negative things / moments, which I did not like, where I would have wished for something else that I do not want to remember

Office filing basket: „I can't do anything with it right now, but maybe I'll need it later“ - neutral experiences which I can't classify at the moment, but which were neither positive nor negative

The participants write all the keywords that are important to them on different index cards. When everybody has finished writing, the participants read aloud what they have indicated on their cards. This is done on a voluntary basis. Afterwards they throw their cards either in the suitcase, the rubbish bin or the office filing basket. Each person may provide a brief justification but doesn't have to.

Target disc evaluation

Target disc evaluation is a visual evaluation tool where the participants can give feedback very easily and quickly. Here, the subjective assessments of the individuals are given anonymously on a target disc. The overall result can be viewed at a glance and thus offers the possibility of joint observation.

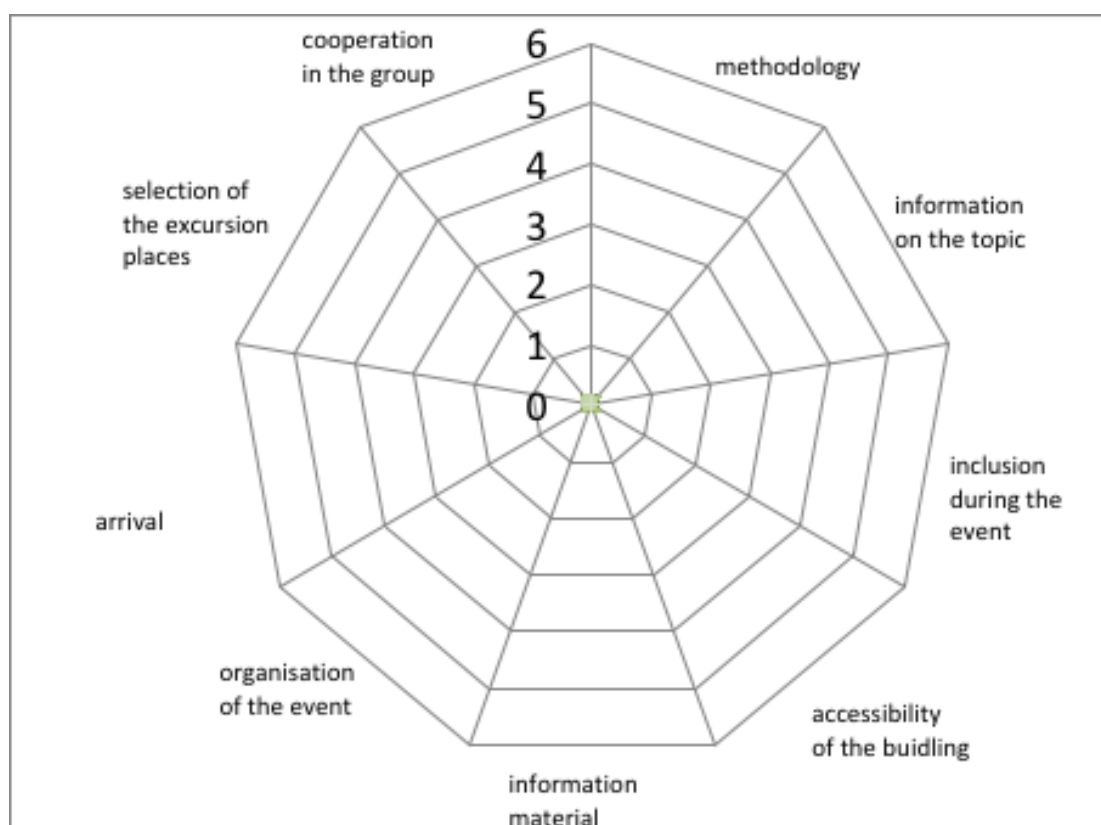
This method is not possible with blind participants and some persons with reduced mobility. For people with learning difficulties it may work with questions written in Easy language supported by pictogrammes.

Preparation: The target disc is painted on a poster, a blackboard or similar. The educator/s should define the relevant questions or topics that should be put on the disc.

Possible topics are:

- noticing something new
- feel-good factor
- inclusion of the participants
- cooperation in the group
- Etc.

Example:



You can adjust the target and query fewer points from the participants.

Note the results and learnings for your next event.

Flashlight feedback

You can use this method during or after a tour or workshop to determine the current mood or opinions in a group. Therefore, you can form a circle and ask the participants to express themselves briefly - with one sentence or a few sentences - about a clearly defined topic.

The flashlight feedback works for all target groups.

Rules for the flashlight feedback:

- Each participant speaks only about him- or herself, his or her personal ideas and expectations.
- Everybody tries to be brief and use only one or two sentences.
- While one participant is speaking, the other members of the group are asked to listen carefully.
- Statements made should not be commented on, evaluated or criticized.
- A discussion can take place when everybody has issued his or her opinion

Possible questions:

- How do you feel after the first part of the tour or workshop/the excursion?
- How high is your energy level right now?
- Do you have any needs before we move to the next part of the tour or workshop?
- Etc.

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